Application No. 10/647,561 Attorney Docket No: 41714-8011.US03

Nektar Docket No. SHE0037.02

Amendments to the Claims:

The following listing reflects amendments to the claims and replaces all prior versions and listings of claims in this application.

- 1. (Currently Amended) A hydrophilic polymer-peptide conjugate comprising consisting essentially of a peptide that is either biphalin or [D-Pen², D-Pen⁵] enkephalin (DPDPE) covalently linked to one or more a water-soluble polymer chains having a molecular weight from about 2,000 to about 100,000 daltons and selected from either the group consisting of poly(ethylene glycol), or copolymers of ethylene glycol and propylene glycol, poly(vinyl alcohol), poly(alkylene oxides), poly(oxyethylated polyols), poly(olefinic alcohols, poly(acryloyl morpholine), poly(vinylpyrrolidone), poly(oxazoline), dextran, and poly(hydroxyethyl methacrylate, wherein said conjugate, when administered into the blood circulation of a mammal, is capable of transport across the blood brain barrier, and wherein said one or more polymer chains optionally possesses an agent covalently attached thereto, wherein said agent is selected from the group consisting of a neuroactive agent, doxorubicin, an imaging agent and a diagnostic agent.
- 2. (Previously Presented) The conjugate of Claim 1, which, when administered to the blood circulation of a mammal, has an extended duration of analgesic effect when compared to the corresponding unconjugated peptide.
- 3. (Currently Amended) The conjugate of Claim 1, wherein said <u>one or more</u> water soluble polymer <u>chains</u> is absent one or more lipophilic moieties.
 - 4-5. (Canceled)
- 6. (Currently Amended) The conjugate of Claim 1, wherein said peptide is covalently linked to at least one terminus of said <u>one or more polymer chains</u>.

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7. (Currently Amended) The conjugate of Claim 1, wherein said peptide is covalently linked at an N- terminus to said <u>one or more polymer chains</u>.

- 8. (Currently Amended) The conjugate of Claim 1, wherein said water-soluble, polymer <u>chain</u> is polyethylene glycol or a copolymer of polyethylene glycol and polypropylene glycol.
- 9. (Currently Amended) The conjugate of Claim 1, wherein said water-soluble polymer <u>chain</u> is polyethylene glycol.
- 10. (Original) The conjugate of Claim 9, wherein said polyethylene glycol is selected from the group consisting of monomethoxypolyethylene glycol, branched polyethylene glycol, polyethylene glycol with degradable linkages in the backbone, homobifunctional polyethylene glycol, heterobifunctional polyethylene glycol, multi-arm polyethylene glycol, pendant polyethylene glycol, and forked polyethylene glycol.
- 11. (Currently Amended) The conjugate of Claim 1, wherein said peptide is conjugated to a single polyethylene glycol <u>chain</u> molecule.
- 12. (Currently Amended) The conjugate of Claim 1, comprising biphalin covalently attached to two polyethylene glycol chains moieties.
- 13. (Currently Amended) The conjugate of Claim 1 wherein said polymer chain is polyethylene glycol having a nominal average molecular weight of about 2,000 daltons to about 40,000 daltons.
- 14. (Previously Presented) The conjugate of Claim 13 wherein said polyethylene glycol has a nominal average molecular weight selected from the group consisting of 2000 daltons, 5000 daltons, 8,000 daltons, 10,000 daltons, 12,000 daltons and 20,000 daltons.

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15. (Original) The conjugate of Claim 13 wherein said polyethylene glycol has a nominal average molecular weight of 2,000 daltons.

- 16. (Original) A pharmaceutical composition comprising a conjugate according to Claim 1 and a pharmaceutically acceptable carrier.
- 17. (Currently Amended) The conjugate of Claim 1, wherein said polymer chain possesses further comprising a neuroactive agent, which may be the same or different from said peptide, conjugated thereto to said polymer.
- 18. (Currently Amended) The conjugate of Claim 17, wherein said polymer chain is a linear polymer having and has a first terminus covalently attached to said peptide and a second terminus covalently attached to said neuroactive agent.
- 19. (Currently Amended) The conjugate of Claim 1, further comprising wherein doxorubicin or an imaging or diagnostic agent is conjugated to said polymer chain.
 - 20 22. (Canceled)
- 23. (Previously Presented) The conjugate of Claim 1 wherein said peptide is biphalin.
- 24. (Previously Presented) The conjugate of Claim 1 wherein said peptide is DPDPE.
 - 25. (Canceled)
- 26. (Currently Amended) The conjugate of claim 1, wherein said polymer <u>chain</u> is absent fatty acids and glycolipids.

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27. (Currently Amended) The conjugate of Claim 1, wherein said polymer <u>chain</u> is <u>monomethoxypolyethylene glycol poly(ethylene glycol) having the formula -CH₂CH₂O-(CH₂CH₂O)_n-CH₂CH₂-, wherein n ranges from about 10 to 2000.</u>

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